

VIRGINIA WILDLIFE

AUGUST 2007

TWO DOLLARS





J. Carlton Courter, III

DIRECTOR



Earlier this summer I had the pleasure of participating in the dedication of our new Region I facility, located at the VCU Rice Center on Route 5 in Charles City County. This site represents a unique partnership between the Department and VCU and supports our efforts to protect Virginia's outdoors with balanced land use.

The new facility was developed with numerous sustainable and energy-conserving measures, making this "green" building a model for earth-friendly construction in the Commonwealth. Furthermore, the VCU Rice Center/VDGIF Region I facility serves as a real world example of Governor Kaine's Executive Order 48 that directs State agencies to reduce energy consumption and operational cost. This facility will be managed with energy conservation in mind.

The Region I site is the core facility that supports field work for approximately 30 cities and

counties. This new expanded operation base will help Department biologists and conservation police officers meet the needs and challenges of the future.

Secretary of Natural Resources L. Preston Bryant, Jr., who was the keynote speaker at the dedication, remarked, "Virginia's identity is its land. Without foresight, without a plan to focus and to manage growth in a balanced way, we

would be failing ourselves and future generations... This facility, this partnership, this opportunity for cooperation between the Virginia Department of Game and Inland Fisheries and the VCU Rice Center helps the Commonwealth to fulfill its constitutional obligation to conserve, to develop and to utilize Virginia's natural resources."

Virginia citizens and visitors place a great value on our rich array of wildlife, fisheries and recreational opportunities. This new facility and partnership better equips us to work towards our mission and to promote the wise use of Virginia's natural resources.



Energy-conserving design and construction at the new Region I facility at the VCU Rice Center includes commercially-forested lumber; steel, which is long-lived and recyclable; low-energy, double-glass insulating windows; natural ventilation; motion sensors for interior/exterior lighting; low water usage plumbing fixtures; and exterior paved areas and plantings to manage rain water run off to seep back into an existing wetland.



Inger Rice (center), along with her husband Walter, generously donated the property to VCU. Mrs. Rice stated during the dedication, "Many people make the mistake to give gifts after they are dead, and then they don't know whether they work out or not. Well, I'm alive now, so I can see it. It inspires me and it encourages me and I hope that it will make other people think about doing something while they're still alive so they can follow it."

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.

Dedicated to the Conservation of Virginia's Wildlife and Natural Resources

Commonwealth of Virginia
Timothy M. Kaine, Governor

LICENSE FEES

Subsidized this publication

Secretary of Natural Resources
L. Preston Bryant, Jr.

Department of Game and
Inland Fisheries
J. Carlton Courter, III
Director

Members of the Board

Ward Burton, Halifax
Sherry Smith Crumley, Buchanan
C. Marshall Davison, Hague
William T. Greer, Jr., Norfolk
James W. Hazel, Oakton
C. T. Hill, Midlothian
Randy J. Kozuch, Alexandria
John W. Montgomery, Jr., Sandston
Richard E. Railey, Courtland
Thomas A. Stroup, Fairfax
Charles S. Yates, Cleveland

Magazine Staff

Lee Walker, Editor
Ron Messina, Julia Dixon, Contributing Editor
Emily Pels, Art Director
Carol Kushlak, Production Editor
Brian Watson, Staff Contributor

Color separations and printing by
Progress Printing, Lynchburg, VA.

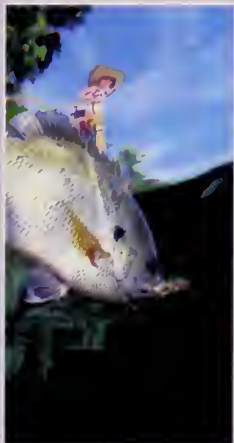
Virginia Wildlife (ISSN 0042 6792) is published monthly by the Virginia Department of Game and Inland Fisheries. Send all subscription orders and address changes to *Virginia Wildlife*, P. O. Box 7477, Red Oak, Iowa 51591-0477. Address all other communications concerning this publication to *Virginia Wildlife*, P. O. Box 11104, 4010 West Broad Street, Richmond, Virginia 23230-1104. Subscription rates are \$12.95 one year, \$23.95 for two years; \$2.00 per each back issue, subject to availability. Out-of-country rate \$24.95 for one year and must be paid in U.S. funds. No refunds for amounts less than \$5.00. To subscribe, call toll-free (800) 710-9369. Postmaster: Please send all address changes to *Virginia Wildlife*, P.O. Box 7477, Red Oak, Iowa 51591-0477. Postage: periodicals paid at Richmond, Virginia and additional entry offices.

Copyright 2007 by the Virginia Department of Game and Inland Fisheries. All rights reserved.

The Department of Game and Inland Fisheries shall afford to all persons an equal access to Department programs and facilities without regard to race, color, religion, national origin, disability, sex, or age. If you believe that you have been discriminated against in any program, activity or facility, please write Virginia Department of Game and Inland Fisheries ATTN: Compliance Officer, (4010 West Broad Street, P.O. Box 11104, Richmond, Virginia 23230-1104).

"This publication is intended for general informational purposes only and every effort has been made to ensure its accuracy. The information contained herein does not serve as a legal representation of Virginia and wildlife laws or regulations. The Virginia Department of Game and Inland Fisheries does not assume responsibility for any change in dates, regulations, or information that may occur after publication."

AUGUST CONTENTS



About the cover: With cane pole in hand, a big straw hat, and a can full of crickets it can mean only one thing—summertime is here, and the living is easy.

Don't let this summer slip by without taking time to share in the enjoyment of

a fishing trip with family and friends.

Fishing is a great way to relax and enjoy the beauty that nature has to offer.

If you would like to learn more about the art of angling and places to go fishing in Virginia visit the Department's Web site or takemefishing.org.

Photo ©Bill Lindner



4 Floating a New Conservation Ethic

by Bruce Ingram

Governor Tim Kaine on preserving Virginia's outdoors.



9 Taking Charge of Fishing's Future

by Tee Clarkson

For one dedicated youngster a successful career could be just one cast away.



14 Side-by-Side

by Clarke C. Jones

Like a fine wine, classic shotguns just get better with age.



18 War of the Worlds

by Brian Watson

The third in a series of articles on exotic species and the threat they pose to Virginia's natural resources.



22 Be Wild! Live Wild! Grow Wild!

by Spike Knuth

Virginia's Terns



27 Sunrise to Sunset

by Ken Perrotte

Experience one of Virginia's premier angling destinations—the Piankatank River.

VIRGINIA WILDLIFE

Magazine Subscriptions

For subscriptions, circulation problems and address changes call

1-800-710-9369

12 issues for \$12.95

24 issues for \$23.95

36 issues for \$29.95

A Field and A Fowl

32 Journal

33 On The Water

Getting All Tied Up!

34 Recipes

Celebrate Your Shooting With a Dove Meal

35 Photo Tips

Improve Your Shots With a New Perspective

Floating a New CONSERVATION ETHIC



by Bruce Ingram

"Sorry, I'm late, I had to finish giving an essay test in third period English 10," I offered.

The excuse was almost as lame as the proverbial "the dog ate my homework," but it was true and the reason why I was late meeting my float fishing partner for the day. But this was not the typical float trip, and a sound reason existed concerning why I had been excused from teaching English the rest of the day at Lord Botetourt High School in Daleville. For the person I was about to share a canoe with was the Honorable Timothy M. Kaine, the 70th Governor of Virginia, and my assignment from *Virginia Wildlife* was for the two of us to cover a wide range of topics of interest to the magazine's readers as we floated down the upper James.

"Don't worry about being late," Governor Kaine responded. "What lures do you recommend for today? I was hoping to do some fishing."

After shoving off from the Eagle Rock access point in Botetourt County, I asked him about his well-known passion for exploring Virginia's rivers.

"I've been floating rivers since I was in the sixth or seventh grade," Governor Kaine told me. "I grew up in Kansas, so my family had to drive to the Ozarks to find a stream where we could paddle. On a family vacation, I remember the first time I floated the Current River I realized that this was something I was going to enjoy doing the rest of my life."

While on a recent float fishing trip down the James River Governor Tim Kaine shared his passion and goal for preserving Virginia's outdoors for future generations.

©Dwight Dyke

"Paddling down a river just letting the current take you, well, there's a beauty to all that. The solitude, the joy of nature, the fishing, the wildlife, never knowing what's around the next bend because every time you float a river, it's a little different...who could ask for anything more."

In college, Tim Kaine organized annual river excursions with his friends, and when he moved to the Old Dominion, he was overjoyed to learn that this state hosts some of the premier paddling and fishing rivers in the country.

"Now, I like a little 'activity' in the form of whitewater, but not too much," laughed Governor Kaine. "On the other hand, my 17-year-old son Nat just loves to experience

Indeed, Governor Kaine then reeled off a series of junkets his family has experienced in recent years. They are (with the destination in parentheses) as follows: 2003 (New, Maury, and James rivers), 2004 (Shenandoah and Rappahannock rivers), 2005 (New River), and 2006 (James River). Camping trips to Douthat State Park have also been undertaken the past few years. I was honored to learn that Governor Kaine uses my books on the James, New, and Shenandoah and Rappahannock rivers to help plan his family's expeditions.

Given Tim Kaine's passion for the Commonwealth's flowing waters, it's easy to understand why he is so interested in protecting these resources for future generations of anglers, paddlers, bird watchers and all



©Bruce Ingram

Governor Kaine on Fishing and Tall Tales

"There's a line in one of my favorite movies, The Man Who Shot Liberty Valance, that goes: 'When the legend becomes fact, print the legend.' I wish I could say that I've caught a legendary sized smallmouth. But the fact is that I've never caught one bigger than between 2 and 3 pounds. I'm still trying, though."



©Bruce Ingram

Like many Virginians, Governor Tim Kaine enjoys spending time in the outdoors with his family, especially when it involves a fun filled float fishing trip down one of the state's many blue ribbon streams or rivers.

whitewater while 14-year-old Woody, I think, is a very good kayaker. I would say that 11-year-old Annella's favorite activity is the camping. My wife Anne and I plan annual family floating trips all around Virginia for our children. Those trips are very special times for us."

those who love the outdoors. A primary goal of his administration is to place more land into conservation easements.

Conservation easements are voluntary, permanent deeded agreements that permanently protect land from subdivisions and commercial development. An easement preserves the scenic, agricultural, natural and historical qualities of a landowner's property while improving the owner's financial security through tax benefits and tax credit sales.

"When I came into office, I thought, 'What was it that I could do to have a permanent and positive effect on preserving our outdoors?'" the Governor told me. "The answer was conservation easements through the Virginia Outdoors Foundation [VOF is the state agency that holds most easements] and other local land trusts. So my stated goal was to set aside 400,000 acres by the time I leave office in 2010."

Roger Holnback, executive director of the Western Virginia Land Trust, calls the Governor's goal "visionary." In 2006, the Old Dominion



©Bruce Ingram

"With every passing day, land is becoming more expensive and scarcer. I will set and meet this preservation goal during my term—not just because it's the right thing to do—I will do it because if I don't, the opportunity to do it will not be there for future governors and future Virginians."

In the Chesapeake 2000 Agreement, Virginia has pledged to permanently protect 20% of the Chesapeake Bay watershed by 2010. The other states that made the same promise—Pennsylvania and Maryland—have already met that goal. Virginia still has 358,000 acres to go.

Getting there won't be easy. In the last 5 years, we've protected an average of 54,000 acres per year statewide, counting both private and public efforts. We need to protect about 72,000 acres per year, just in the Chesapeake Bay watershed, in order to meet the goal.

It will be the goal of my administration to meet that obligation and surpass it. Since 1968, the Virginia Outdoors Foundation has preserved 330,000 acres of land. Most of that has been preserved in the past five years. The goal of my administration is to preserve an additional 400,000 acres throughout Virginia by the end of the decade."

*Governor Tim Kaine,
17th Annual Environmental
Virginia Symposium, April 20, 2006*



©Bruce Ingram

came close to matching that pace of 100,000 acres protected per year, as 93,000 acres were placed under easements, up from the some 55,000 acres per year previously. I told Governor Kaine, that 120 of those acres from 2006, was land in the Sinking Creek Valley that I had placed under an easement, and that altogether I now had 392 acres in Craig County protected in that manner.

"Citizen involvement like yours is so important," he responded, "to protect Virginia's natural beauty. "But easements do much more than that. For example, an easement along our rivers helps protect our water quality for fishing and drinking. Easements can also help create buffers between agricultural lands and streams and prevent runoff."

"They can even help protect air quality because they keep land from being developed. People also need to realize that an easement here on the upper James has positive effects well downstream on the Chesapeake Bay. "I want to be like Johnny Appleseed, Governor Kaine said. The way he planted seeds for the people to come, I want to plant the seed for conserva-



Jack Leffel, (left) a farmer from Eagle Rock, shows Governor Tim Kaine a historic structure along the James River and old Kanawha Canal. Leffel owns land along the James that he has placed under a conservation easement.

tion easements and those Virginians who come after us."

Our conversation then turned away from the serious aspect of easements to, well, the serious aspect of smallmouth bass fishing. Governor Kaine confirmed that his favorite freshwater game fish is the smallmouth bass, and commented that the crankbaits and minnow plugs that we had been casting had not produced any action.

He mentioned that his go-to lure is a tube. A lure switch was made, and we ended up catching several smallies on this soft plastic. The topic of smallmouth bass angling turned us to another subject much on the mind of Virginia outdoors enthusiasts—the series of fish kills on the Shenandoah and James rivers.

Governor Kaine said that a major priority of his administration for the next General Assembly session is to pass legislation to help reduce/prevent runoff from agricultural concerns from entering our state streams. The Governor also mentioned that he is strongly supportive of the work that Jeff Kelble, the Shenandoah River Keeper, is doing as a watchdog for the waterway.

Our afternoon of float fishing was spent on part of a 16-mile section of the James in Botetourt County that in 1982 received Scenic River Status. Despite that designation, in recent years this section has faced a number of challenges to its future including a proposed quarry on a tributary, shale mining and even a dam.

Historically, this section features a number of structures from the



James River and Kanawha Canal that date from the late 18th century, and despite development in Botetourt, this river through there remains isolated and the banks heavily wooded.

At about the mid point of our getaway, Jack Leffel, an Eagle Rock farmer who owns land along the Scenic River section, took my place in the canoe with Governor Kaine. Leffel spoke of his love for the James.

"Back in the 1980s, I was one of those active in helping to have this section placed under the Scenic River designation," said Leffel. "In recent years, I began looking for a way to permanently protect the 150 acres or so I own along the river, which covers close to two miles of river front.

"I wanted to protect the land for my sake, my kids' sakes, for future generations, for whomever. That's why my wife and I decided to place our land under a conservation easement. The next time this part of the James is under attack from development, I hope my easement will serve as one more layer of protection for it."



©Bruce Ingram

As Governor Tim Kaine completes his journey down the James River, he is reminded of the importance in preserving and protecting such areas—not only for outdoor enthusiasts like himself, but for his children and future generations.

At the end of the float, our respective canoes pulled up to Leffel's property, and Jack showed Governor Kaine stone wall remains from the old canal. As Leffel told me "We just own the land for a few minutes of time. I hope the Governor's conservation easement goal is accomplished." □

Bruce Ingram is the author of The James River Guide, The New River Guide, and The Shenandoah/Rappahannock Rivers Guide. For more information, contact Ingram at be_ingram@juno.com.

For More Information

Jeff Kelble

(Shenandoah River Keeper)
www.potomacriverkeeper.org

New River Land Trust

www.newriverlandtrust.org

Virginia Outdoors Foundation

www.virginiaoutdoorsfoundation.org

Western Virginia Land Trust

www.westernvirginialandtrust.org

Department of Game and Inland Fisheries
www.dgif.virginia.gov



©Bruce Ingram

©Dwight Dyke

Taking Charge of Fishing's Future



For young Jelani Hennessey the lure of a successful career as a pro angler is just one cast away.

by Tee Clarkson
photos by Dwight Dyke

It's the eighth of October on the Potomac River. I don't have many expectations as far as the fishing goes. A vicious Nor'easter has dumped 5 to 6 inches of rain on us in the last two days, and the water temperature has dropped over 10 degrees in a week. To make the conditions even tougher, the low layer of clouds is beginning to break up and the sun is popping through. If the weather gurus are right, in an hour it will be clear and sunny, a welcomed change for the fishermen but not for catching fish. Fishing in a bright, high pressure system following a cold front makes for some of the toughest conditions a bass fisherman can face.

The good news, I am going fishing with a pro, Jelani Hennessey. You probably don't know his name, and you haven't seen him fishing on ESPN2 in the Bassmaster Elite Series.

You might in a few years. Jelani is only 15, a sophomore at Caroline High School, but he is a rising star in the bass fishing world.

When I arrive at Hope Springs Marina, Jelani and his father are already there, standing next to his red, metallic bass boat. Jelani is smiling as I walk up and extend my hand. I will come to find out Jelani smiles a lot.

"Ready to go fishing?" he asks. In a few moments the boat is on the water and we pull away from the dock. Jelani is driving, his father sitting in the middle, me on the left.

"You ready!" Jelani shouts as we idle past the NO WAKE sign.

"Yeah"

Like most fishermen and women, Jelani's first experience on



©Dwight Dyke

Angela Kates, Jelani's mother, travels five to six hours a day to and from work so Jelani can live closer to the best bass fishing in the area. She spends countless hours on the water watching as Jelani fishes on the weekends. "I even caught one last year," she says, laughing, "Usually I bring my pillow and take a nap." Jelani is sponsored by Bass Pro Shops and Mare of Aquia in Fredericksburg. He hosts a radio talk show at Bass Pro Shops in Baltimore about every other month.

the water was with his father, who took him fishing on a farm pond when he was 4 years old. He was immediately intrigued, fishing wherever and whenever he got a chance. His father, James, a U.S. postal worker, admits, "He took it to a new level."

When Jelani was 9, he saw a Bassmaster Tournament Trail event on television. Immediately he was searching the Internet to find a youth event in his area. He found one. Within several months he had fished his first tournament. Since then, over the last six years, Jelani has fished in more than 30 youth bassfishing tournaments. Primarily he fishes in Virginia B.A.S.S. Youth Federation tournaments, but next year he plans on fishing some Open events that include semi-pros and pros from



©Dwight Dyke





Jelani recently won the state qualifying event on Philpott Reservoir, which included more than 50 junior anglers. He will now advance to the Junior World Qualifier later this summer with a chance to earn a spot in the 2008 Junior World Championships.

around the country, his ultimate goal being to fish professionally.

Jelani powers the throttle down and we are off, popping up on plane and cruising in the channel. The wind feels invigorating. Despite the tough conditions, we are hopeful. Glad to be out. Glad to be here. Glad to be fishing.

Exactly where true altruism comes from I can't say. Some argue nature and others nurture. Regardless, Jelani has it, a true caring for others that is evident as soon as he drops the trolling motor and we start fishing and talking about the future. For someone his age he has remarkable vision and an understanding beyond his years. He comments that he "wants to get kids involved so there is someone to carry on the sport." Jelani has done his best to make this happen, organizing youth fishing events and speaking at youth programs hosted and sponsored by Bass Pro Shops.

When he and his family first moved to Virginia, Jelani looked for a fishing club to join. The closest one he could find was the Black Hollow

Fishing Club in Dublin, Va. Unfortunately, Dublin is a six hour drive from Ruther Glen where Jelani and his family make their home. Jelani made a few meetings thanks to his mother and father's willingness to drive him, but there was no way they could go as often as Jelani would have liked. His mother asked him to use his imagination and be creative until she could find him a club closer to home. Jelani did just that. If he couldn't go to the club, he would bring the club to him. When he was 12, Jelani started www.bassfishing4kids.com, an online fishing club for kids. He began Bassfishing4kids.com "so kids that don't have clubs around them can fish competitively and not have to travel," says Jelani.

Jelani's online club now boasts members from Virginia, Maryland, North Carolina, South Carolina, Georgia, Arkansas and New Jersey. The Web site, which he constructed and maintains, consistently gets over 1,500 hits a week. Club members

share techniques and tactics and compete in a monthly big bass competition, submitting their entries via photos and measurements, everything being done on the honor system. The winner receives a \$25 gift certificate to Bass Pro Shops.

Jelani works the boat around a point with a few submerged logs, and we fire spinnerbaits at the bank. No luck. We switch to jigs and slow down. Still no luck. "I always get one around this point," Jelani says. Not today. It appears, as anticipated, the fishing will be tough. I joke: "We just need one for some photos." It is early. I am not worried. An hour passes. We still haven't boated a fish. Now I am beginning to worry. We slip back to the marina quickly to drop off Jelani's father and pick up his mother.

If I wondered where Jelani got his generosity and warmth, I found my answer upon meeting his mother. A Critical Care nurse at Prince George's Hospital Center in Cheverly, Maryland, Jelani's mother drives



©Dwight Dyke

five hours round trip to and from work so that Jelani can live in a place that provides him the best and most fishing opportunities. She is his usual fishing partner, or at least usual fishing companion. She admits, "Usually I bring my pillow and take a nap while he fishes." She smiles as she recounts Jelani's early days as a fisherman: "He was in everything: karate, football, all the sports. All he wanted to do was go fishing." And go fishing he has. "He fishes Saturday and Sunday of every weekend. Even when he's sick he will say, 'Mom it's just a little cold.'" She starts laughing: "I am proud of him. He hasn't given up on it and I don't think he will."

Jelani idles to a boat dock and shuts off the engine. We try spinner-

With tough conditions and time running out on our short fishing excursion, Jelani's versatility and persistence paid off as he captured this keeper bass on a shallow running crankbait on his last cast of the day.

baits and jigs again. Still no fish. I would hate not to have any pictures of Jelani with a fish. I don't say anything this time. He knows what I am thinking. We have another hour. A week ago Jelani finished fourth in the Junior World Championships, fishing in this same creek. But as anyone who fishes knows, a week can make a lot of difference. Another 30 minutes passes. No fish. Not a tournament fisherman myself, I begin to get a sense of what it is like to fish with pressure. Fishing with pressure is old hat for Jelani. He has finished in the top four in his last four tournaments, winning the junior division of the Maryland Invationals in June, which includes fishermen from seven different states.

Time is about up. We will have to take photos before it gets too dark. I have already come to grips with the fact that we will have no fish. Jelani wants to make one more stop at the first point we fished and try something different. His favorite fisher-

man on the professional B.A.S.S. tour is Dennis Brauer because Jelani prefers to fish the same way as Dennis does, flipping and pitching jigs. He also admires Mark Davis for his versatility. Jelani draws on that versatility now, switching to a shallow running crankbait, ready to make his last few casts. I have given up on the fish and follow a pair of mallards as they drop into the back of a cove across the river. Then I hear Jelani from the front of the boat: "Got Him!" □

Tee Clarkson is an English teacher at Deep Run High School in Henrico County. In the summer he runs Virginia Fishing Adventures, a fishing camp for kids. Contact: tsclarkson@virginiafishingadventures.com.

For More Information

Check out Jelani's online bass fishing club for kids:

www.bassfishing4kids.com.

Virginia B.A.S.S. Youth Federation tournaments:

www.vafederationnation.com.



©Dwight Dyke

BY CLARKE C. JONES
PHOTOS BY DWIGHT DYKE

**A SHOTGUN
MAY BE JUST
A HUNTING
TOOL, BUT A
CLASSIC
DOUBLE
BARREL IS
LIKE MONEY
IN THE BANK.**

When my father opened the door under the stairs that led down to the dirt basement in our old house, his setter Rex, who spent most of his time lying around dreaming dog dreams, would spring to life and start doing a four-legged cha-cha. If my dad returned with his Lefever side-by-side shotgun, that dog became a whirling, furry tornado. On one particular Saturday morning that setter and I became dance partners. I was now 10 and old enough to shoot. I had followed my father and his setter before, watched them team up and bring home a few quail for supper. My father was the epitome of grace on a covey rise. Everything seemed unhurried and precise as he brought down a quail. And because he shot so well and looked so good doing it, I knew automatically I would be a natural at this game and how proud my father would be of how grown up I had become when I duplicated his actions in the field.

When Rex started looking birdy, my father motioned me to stay close to him. When the setter froze on point I was handed his 20 gauge and told to walk slowly towards the four-legged statue his dog had become. Walking toward Rex as one would walk through a mine-field, expecting an explosion under my feet with each step, I was wound tighter than a spring when I reached the dog. Nothing happened. My father motioned me to walk past the dog and in the middle of my second step the earth seemed to come apart beneath me. I mounted the gun and tried to look down one of the bar-

SIDE-BY-SIDE





A standard five-man squad using a variety of vintage double barrel shotguns takes aim during a sporting clays shoot. Below: Jim Rice, of Charlottesville, an admirer of fine classic shotguns, organizes the Virginia Side-by-Side Shoot each year to promote not only the collecting of antique shotguns, but also the art of shooting them.

IDE



rels and then the other as quail crisscrossed in front of me. Just as I would site a bird down one barrel another would whiz by and distract me. I knew I was losing precious time as my eyes kept jumping from one barrel to the next and then one bird to the next. In desperation I fired. It was not good. The ill-fitted lightweight gun's recoil drove deep into my shoulder and the gun's stock rose to meet my jaw with such force I didn't remember hitting the ground. I lay there confused and deeply embarrassed. It would be 15 to 20 years before I picked up another doubled barreled shotgun and it was not a side-by-side.

My experience was probably not uncommon. Back in the 1950s if there was a shotgun in the household it was probably a side-by-side, and if it was a 20 gauge, it was more than like-

ly a lightweight gun and the shot loads were normally heavier than those used today. Lightweight, ill-fitted guns with heavy shot loads usually meant a painful surprise to an unsuspecting pre-teen. Add that to the shooting plane a side-by-side shotgun presents and you can easily speculate as to why the side-by-side shotgun entered into a state of decline and over and under shotguns for many years had become the shotgun of choice for hunters and recreational shooters alike.

Over the last decade, however, there has been a resurgence of the side-by-side shotgun by more than the occasional collector of antique guns. Americans tend to have a strong affection for anything classic or nostalgic. And though we are drawn on one hand to high technology, our passion for things classical and rare has led us to old decoys, cars and fine wines. We also learn the



Made in 1906, this Churchill Imperial Grade side-by-side is a good example of the quality workmanship that went into producing a classic shotgun. The fine hand carved scroll along the receiver and barrel was typical of this time period.

value of these items tend to rise before we can get into the collection game or sometimes even know there was a game to get into. An old classic side-by-side shotgun seems to be the next "new thing" for collectors and shooting sportsmen. There was very little argument among shotgun enthusiasts as to the beauty of design of a Parker, L. C. Smith, or A.H. Fox shotgun. However, for most homes in rural America from the late 1800s to World War II a shotgun was looked upon as a tool, not something bought



©Dwight Dyke

There are many people across the country who find collecting classic shotguns a great investment. There are also those who derive great pleasure by actually going out and putting them to good use.

for its aesthetic good looks. During the two World Wars, however, Americans became aware that the English and Germans made superior or "Best" shotguns.

Unlike some antiquities that just sit after their purchase, vintage shotguns over a hundred years old are shot at side-by-side tournaments across the country. Jim Rice of Charlottesville, an appraiser and importer of fine European shotguns holds the Virginia Side-by-Side Shoot each year. Jim is passionate about the shotgun and its history, and has done much to promote the revival of the side-by-side shotgun in Virginia. At shoots such as these one can not only

shoot but also view rare shotguns that either your grandfather or great-grandfather used or had been used by European royalty. Guns at these shoots could be anything from a 1925 Parker or a 1906 Churchill Imperial, one of only two ever made.

When asked about the revival of the side-by-side shotgun, one shooter from Richmond, who participates in these national side-by-side shoots replied, "These guns are investments you can use for two to three years and then turn around and sell them for more than what you paid for them. Try doing that with the next boat you buy." Indeed some of these shotguns can be an investment when you consider there is still a great deal of handwork in a fine European gun where the scroll work alone could range upwards to \$10,000 and have a waiting period of 5 to 6 years from the date of your order. Other side-by-side shoot-



©Dwight Dyke

This scarce Parker DHE Grade, 20-gauge side-by-side was made in 1925 and is valued today at around \$10,000.

ers, Zeb Holt from Tidewater and Dick Livingston from Lynchburg, probably say it best when speaking of the increased interest in these guns. "The popularity of these guns has come about as a result of improved lightweight loads that takes the pain out of shooting and the baby boomer's interest in things classic and well made. These older guns offer an opportunity to own something fine, like a great wine, that one can use and enjoy as opposed to have it sit in a cellar where you may visit it from time to time."

For some owners these guns have a deeper personal meaning. As one gentleman explained "This gun belonged to my grandfather, a man I only knew from pictures of him in an old felt hat and tall leather boots holding this gun. It sort of gives me a chance to maybe feel a little what he may have felt every time I hold it." Whether it came from a Sears catalog in the early 1900s or from the finest gunsmiths in Europe, collectors and shooters of these shotguns all agree there is something special about owning a side-by-side. And like many things we choose to own, it more than any other gun, says something about what we value. In our ever changing world of technogear these guns are a link to a nostalgic past where things could be simple but elegant. They offer the owner an appreciating investment of a useable yet timeless antique. As so often happens old things become new again and that old shotgun you may have stored in the attic or garage and have long forgotten may have steadily increased in value. Before parting with or shooting it have it examined and appraised by a knowledgeable and reputable appraiser of shotguns. At the very least obtain a copy of *The Blue Book of Gun Values*. □

Clarke C. Jones is a freelance writer who spends most of his spare time with his black lab Luke, hunting for a good story.

Collecting firearms is a great way to learn more about shooting sports, the history behind the guns, and the people who made them famous.



©Dwight Dyke



©Dwight Dyke

War of th

TRYING TO WIN THE BATTLE

story and photos
by Brian T. Watson

In 1938, Orson Wells caused a panic across the country with his radio broadcast of "War of the Worlds." For those not familiar with this event, a fictional news report about aliens invading Earth was broadcast in the Northeast and had thousands fearing the end was near. Eventually, everyone came to understand that this was a fictional story and aliens were not wreaking havoc and causing death throughout cities across the United States and they never have. However, as a Wildlife Diversity Biologist with the Department of Game and Inland Fisheries, I happen to know this is not the case—aliens have been and are running amuck, even causing deaths, in cities across the U.S., and in other countries for that matter. "How can this be?" you say, with no television or radio reports of alien sightings or evidence of destruction. Well, the aliens to which I'm referring are not the typical large-headed, bug-eyed creatures depicted in books or the laser-shooting, hulking beasts often portrayed in movies from far-away planets. Rather, I'm talking about alien species that live right here on planet Earth, but which may be better known as nonnative, nonindigenous, or exotic species.

You may wonder, if a species naturally inhabits our planet, how can it be considered an alien? Nonnative, nonindigenous, or exotic species are

animals or plants that are not native to a locality or did not evolve in that area but have since become established. These species typically arrive in their new surroundings through no actions of their own but accidentally or intentionally through human actions. Such avenues include bait bucket introductions, release of pets, transport on watercraft, scuba and fishing gear, ballast water discharge, interstate and intercontinental shipments, and intentional releases for the purpose of establishing the species in a new area. It is estimated that 50,000 alien species inhabit the U.S., with some of the better publi-



The third in a series of articles that look at the introduction of exotic species and the threat they pose to Virginia's wildlife and natural resources.

cized examples being kudzu, zebra mussels, snakehead fish, killer bees and West Nile virus. While numerous alien species introductions cause no problems, many nonnative species do cause significant biological, ecological and economic harm. These species are referred to as invasive species. The main reason for the tremendous problems caused by these invasive species is that there are no natural checks and balances in their new environment. In its native range, a species may be kept in check by a predator or some environmental condition. However, in a new environment, a species can thrive unchecked and often outcompete native plants and animals to their detriment. In fact, invasive species pose one of the main threats to our natural heritage. They directly threaten native species and can alter landscapes and ecosystems. Nearly 50% of the 1,180 imperiled or federally listed species are directly threatened by

Brian Watson, a wildlife diversity biologist with VDGI, searches for invasive crayfish in a Virginia stream.

e Worlds

AGAINST INVASIVE SPECIES



Red swamp crayfish

competition with or predation by invasive species. In fact, invasive species are considered the top threat to native plants and animals after habitat loss. Killing or eradicating invasive species is typically a futile effort and controlling them is extremely costly. Nationally, invasive species result in an estimated annual cost of \$120 billion. These monetary losses range from the loss of crops and wildlife viewing opportunities to control of these alien species. Virginia is not immune to invasive species and is experiencing the same problems we see at the national level. Hundreds of invasive species have invaded

ed the state, resulting in annual costs of as much as \$1 billion.

While you may have heard of the recent discovery of snakehead fish in the Potomac watershed or are familiar with kudzu, there are numerous other invasive species that mostly go unnoticed and either have already invaded the Commonwealth or may arrive in the near future. I will present just a fraction of these alien invaders, with a focus on aquatic species.

Didymo (*Didymosphenia geminata*) is a microscopic, single-celled alga, within the group of algae called diatoms. These single-celled organisms grow on stalks and form large colonies in freshwater systems. Once a beautiful and rare diatom restricted to pristine lakes and streams of northern latitudes, this species is no longer rare. It seems this alga has unknowingly been transported on anglers' gear and is now causing problems. Referred to as rock snot, Didymo colonies are visible as white to light brown tufts attached to rocks and often appear as strands of toilet paper or fiberglass. While the only

Didymo, or rock snot, engulfs a rock after invading a stream. The spread of this diatom could have negative consequences on Virginia's fisheries and other aquatic wildlife.



YOU CAN HELP

Hitchhiking isn't as popular as it used to be, except if you're an aquatic hitchhiker. Over the past few decades, thousands of aquatic species have moved into and across the U.S. by "hitching" rides on watercraft and associated equipment and in ballast water, resulting in tremendous biologic and economic impacts. In an effort to combat these hitchhikers, the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries have partnered to post "Stop Aquatic Hitchhikers!" signs at boat ramps across the Commonwealth. So please be on the lookout for these signs and follow their instructions to help us stop these invaders! If you operate a boat ramp and are interested in posting a sign, or would like to display one in a related business, please contact Brian Watson at (434) 525-7522.

After a long day of fishing, the last thing likely on your mind is properly disposing of any remaining bait. Unfortunately, too many times this bait is dumped into a local lake or stream rather than in the trash, resulting in unforeseen impacts to native fisheries and other aquatic organisms. The Virginia Department of Game and Inland Fisheries is trying to make the angling community and general public more aware of this problem through the distribution of "Don't Dump Bait!" stickers at locations like bait shops, tackle shops and sporting goods stores, through angling guides and groups, and at events like fishing clinics. Signs are also being posted at boat ramps and some of the aforementioned locations. If you are interested in obtaining stickers for distribution at your business or through your organization, or a sign for posting, please contact Brian Watson at (434) 525-7522.

direct human impact appears to be eye irritation in swimmers, as the colonies develop, they smother rocks and benthic organisms, like aquatic insects and fish eggs, and can impact adult fish species. Excessive colonies can stretch for tens of miles and persist for weeks to year round. Didymo has been discovered in Virginia in the tailraces of the Smith and Jackson rivers, both of which are high quality trout fisheries. While the impacts in Virginia are yet unknown, it is believed fisheries may be negatively affected in these areas, as well as other freshwater systems in which Didymo is introduced. New Zealand is currently battling this tiny organism and experiencing significant declines in trout fisheries. At the least, aesthetics will decline as the growths will snag fishing gear, making these areas unappealing.

Crayfish, or crawdads, are best known for two things—fish bait and food. However, crayfish also are critical components of aquatic environments. Crayfish feed on algae, leaves, plants and smaller invertebrates such as aquatic insects, while serving as a critical food source for game fish like smallmouth and largemouth bass and helping to sustain economically beneficial fisheries resources. However, crayfish have caused tremendous unintended consequences when introduced outside their native range. The problems vary from habitat destruction to the elimination of



Virile crayfish

native crayfish species. Invasive crayfish species are typically much more aggressive than their native counterparts, will attack game fish, and often reach larger sizes making them much more difficult for game fish to consume. Likewise, habitat destruction usually occurs to aquatic vegetation, which is a critical habitat resource for many other aquatic species including larval fish. Reduced aquatic vegetation results in reduced young fish and, naturally, less adult fish. In Virginia, at least two invasive species are established, the red swamp crawfish (*Procambarus clarkii*) and the virile crayfish (*Orconectes virilis*). The red swamp crawfish is native to the gulf-coast region and is the typical crayfish used in aquaculture. In Virginia, the species is established mainly in Coastal Plain areas but is often found at fish hatcheries across the state. The virile crayfish, native to parts of the Midwest, is a common crayfish sold as bait. In



Above: Rusty crayfish

Crayfish are often used for bait to catch other game fish. They are also prized as a delectable culinary delight in many areas of the country. In recent years numerous invasive crayfish species have found their way into Virginia's waterways causing habitat destruction, which in turn threatens other native aquatic species.



Virginia, the species is established in portions of the New, James and Potomac river watersheds and was noted by the author in Smith Mountain Lake last summer. Both crayfish reach larger sizes compared to native crayfishes and are much more aggressive than their native counterparts. In streams where the virile crayfish have taken up residence, they are typically the only species you now find, so impacts to native crayfish species are obvious. Impacts to the Commonwealth's fisheries resource have yet to be determined. One species where the impacts are clear is the rusty crayfish (*Orconectes rusticus*). Native to parts of the Midwest, this species has yet to be documented in Virginia but has been found just across the border in the Clinch and Holston rivers in Tennessee. This species has been called the "clear-cutter" of aquatic systems for its ability to shred aquatic vegetation. Likewise, it reaches a fairly large size and is extremely aggressive, even attacking humans if approached! Unlike other invasive crayfish species, the rusty crayfish has been observed raiding fish nests and eating the developing eggs. In hopes of preventing the introduction and spread of invasive crayfish species throughout the Commonwealth, the sale of live crayfish as bait or in the aquarium trade was banned in July 2006. However, with the virile crayfish already established and the



Courtesy of US Fish and Wildlife Services



Although minute in size, the New Zealand mudsnail can cause large problems in aquatic systems. They have rapidly infested water and river systems in parts of the western United States clogging intakes and harming native fisheries. Even though they are not found in Virginia, biologists are concerned that it may be just a matter of time before they show up.

rusty crayfish standing at our doorstep, is it too little, too late?

As its name indicates, the New Zealand mudsnail (*Potamopyrgus antipodarum*) is native to streams and lakes in New Zealand. This tiny snail, reaching a maximum size of less than a half inch, can reach densities in the 100,000s per square yard, blanketing stream bottoms. Impacts include bio-

fouling of intakes, elimination of native benthic species, and impacts to native fisheries. First found in the U.S. in the Snake River in Idaho, in 1987, it is believed the snail arrived either in ballast water discharged into the Great Lakes or in the water of live gamefish shipped from infested waters to western rivers. Now documented throughout parts of the western states east to Colorado, the snails' spread has been facilitated through attachment to fishing and sporting equipment. Yet to be found in Virginia, it may only be a matter of time.

What can be done to stop the introduction of alien species, particularly invasives? While Virginia has regulations prohibiting the release of wildlife and the sale and possession of certain species, these regulations are only as strong as the citizens who carry them out. Additionally, these regulations will not reduce or prevent the unintentional introduction and spread of invasive species. Therefore, it is clear that if we are to win the battle against these alien creatures, it is our own behaviors and attitudes that must change. While tackling issues such as ballast water discharge and interstate and intercontinental shipments may be beyond our capacity, we can and must be more diligent in preventing alien species from spreading through our own actions. The first, and most important, step in this endeavor is educating yourself and friends. Many Web sites such as the U.S. Department of Agriculture's National Invasive Species Information Center (www.invasivespeciesinfo.gov) or the Virginia Invasive Species Council (<http://www.dcr.virginia.gov/dnh/vaisc/index.htm>) are good places to start, or you can contact your local Department of Game and Inland Fisheries office. In an effort to help in this capacity, the Department has recently publicly targeted two pathways—bait bucket introductions and aquatic hitchhikers (see sidebars). With your help, hopefully we can slow and even prevent some of these modern-day "War of the Worlds." □

Brian Watson is a Wildlife Diversity Biologist with the Virginia Department of Game and Inland Fisheries.



Common tern

VIRGINIA TERN

Like their gull cousins, terns all have basically the same colorations, gray, white and black with variations of black, gray and white markings on their wings, and red or yellow feet and bills. If they have black caps or bodies, their winter plumage changes them to basically white with markings of gray and

story and illustrations
by Spike Knuth

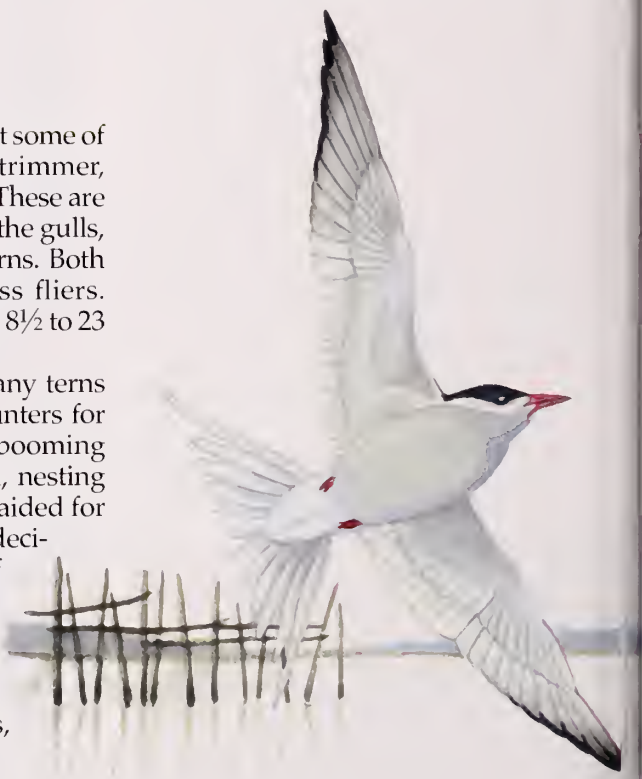
A visitor to any coastal waters in Virginia will see a multitude of birds milling about with long, narrow wings, coasting, soaring, or trading back and forth over the waves in graceful flight. At first glance they may all look alike and there's a tendency for people to lump them under the name; "sea gull!" But they are not all gulls.

A closer look reveals that some of the birds are smaller and trimmer, with straight, pointed bills. These are the close family relatives of the gulls, in the family *Laridae*, the terns. Both are graceful, almost tireless fliers. Our terns range in size from 8½ to 23 inches.

As late as the 1890s, many terns were collected by plume hunters for feathers used in the then booming millinery trade. In addition, nesting colonies were consistently raided for their eggs to the point of decimating the populations of many species. Some have recovered, while others are still struggling due to loss of habitat, human disturbance, high flood tides, and predation.

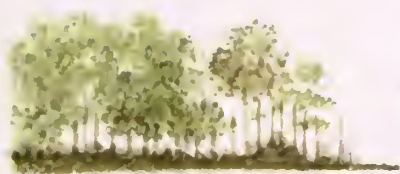


Little tern



Arctic tern

Be Wild! Live Wild!



Forster's tern

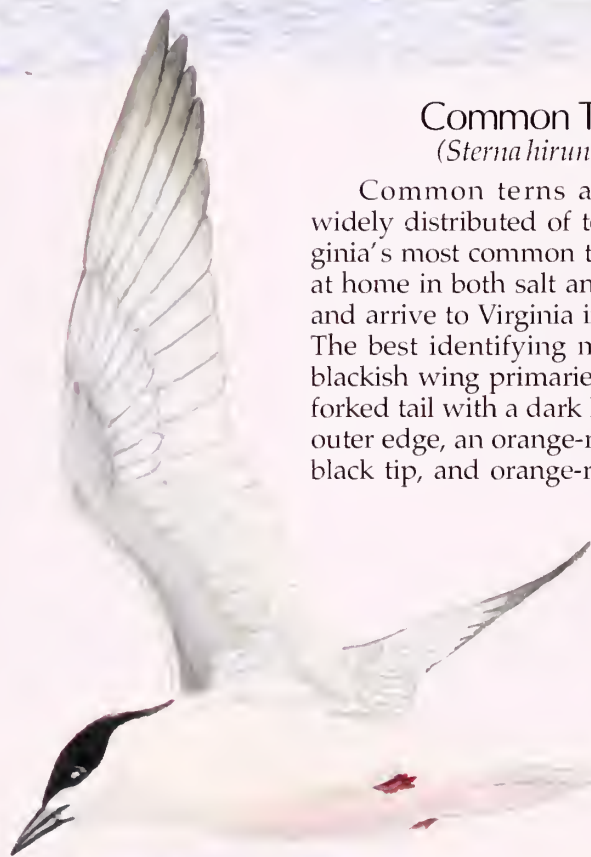
black caps changing to streaks or spots around the eyes of varying patterns.

Terns are slimmer in build, have narrow wings, and forked tails. They search for food on the wing, flying with quick wing beats, head and bill pointed downward. When they see a fish or school of fish, they sometimes hover briefly before plunging headfirst with great force into the water. However, not all terns feed in this manner. Some "hawk" over fields and marshes for large insects. Others will deftly pluck food off the surface of the water. While terns have small webbed feet and are able to swim they seldom do.

Some terns are found on the coast and in mainly saltwater habitats, while still others are at home in both salt and freshwater, and some prefer freshwater habitats for breeding. Most terns are gregarious, nesting in colonies along with gulls, skimmers and a variety of shorebirds. They nest on beaches, shell islands, sand flats, dunes above the high tide marks, or on the edges of marshes and lakeshores. Their nests are shallow depressions, hollows or scrapes on sandy ground, in dead aquatic vegetation or on floating vegetation. For most species incubation averages 20-23 days. Hatched young are precocial and are immediately active searching for food. They are among the most elegant and interesting of all birds.

Common Tern (*Sterna hirundo*)

Common terns are the most widely distributed of terns and Virginia's most common tern. They are at home in both salt and freshwater, and arrive to Virginia in early April. The best identifying marks are the blackish wing primaries, pure white forked tail with a dark line along the outer edge, an orange-red bill with a black tip, and orange-red feet. They



Roseate tern





Caspian tern

feed mainly on small fish caught in typical tern fashion. Nesting colonies are declining in part to gull predation. Come September, common terns move southward to Florida and points south.

Forster's Tern (*Sterna fosteri*)

The Forster's is similar to the common tern. Its best identifying mark is the fact that it has a gray forked tail as opposed to the common's white tail. The outer tail feathers of the deeply forked tail are long and narrow and has white outer edges with a dark border on the inside of the fork. Its bill is yellowish-orange. The Forster's flies with quicker wing beats and not as deep of a stroke.

They arrive to Virginia in early-April and are common summer residents. However, many breed farther north and west on the Great Lakes and prairie regions of the U.S. and Canada. In Virginia it nests in the tidal marshes of the Chesapeake Bay and on the seaside of Eastern Shore. They eat insects as well as fish and often sweep over marshes catching dragonflies or plucking food from the surface. It is probably seen more as a migrant here in Virginia, and they often linger late into winter before moving south to the Carolinas. It is a species of special concern due to

the destruction of nesting habitat, human disturbance, and predation by gulls.

Arctic Tern (*Sterna paradisaea*)

This is another look alike tern to the common and Forster's, but has a smaller head than both, and a deeper forked tail than the common. While the common and Forster's have white undersides, the Arctic is gray underneath with a narrow white line of white just under its black cap. Its bill is shorter and blood red in color with a black tip.

The Arctic tern accomplishes one of the most amazing migrations of all birds. While it breeds in the Arctic, beginning in June and after spending

14 weeks to raise their young, they leave the Arctic and fly 11,000 miles over open seas to the edge of the Antarctic. Seldom is it seen along the Atlantic Coast south of Long Island and it is a rare and special treat to see one off the Virginia Coast but not impossible. As it gets closer to spring in the Northern Hemisphere, they make the return trip back north, making a 22,000 mile round trip flight in 20 weeks.

Little Tern (*Sterna albibrons*)

Also known as the least tern, this is the smallest and daintiest of our resident terns and is best identified by its black cap with a white forehead, a yellow bill with a black tip, and yellowish legs. The little tern has a more rapid wing beat and it looks hunchbacked in flight.

Little terns favor flat, open beaches or sandy flats for breeding and loafing. During courtship, the male will bring food offerings of small fish to the female. Nesting begins in late-May in Virginia. The main nesting colonies are scattered



Sandwich tern

over many of the Barrier Islands of Eastern Shore, Grandview Beach in Hampton, some Mathews County marshes, and Craney Island in Portsmouth. Little terns breed almost worldwide.

While they are tolerant of some disturbance, it is considered threatened mainly due to loss of nesting habitat, too much human disturbance, high flood tides, and predation by gulls and mammals.

Roseate Tern (*Sterna dougallii*)

The roseate tern is another tern that was nearly exterminated by plume hunters in the 1890s. It is considered the most graceful flier of all the terns as it flies with quick, shallow wing beats. It can be identified by its longer black bill, which is red at the base, a long, deeply forked white tail, and rosy tinted underside.

It is more of a maritime tern feeding mostly over the sea on open water, large bays and estuaries. Only during nesting is the roseate seen in any numbers. On the Atlantic Coast they nest mainly in the northeast, rarely to New Jersey and Virginia. They are uncommon and on the decline.

Royal Tern (*Sterna maxima*)

The royal tern is another fairly common nesting tern in Virginia. It's a large crested tern, measuring 18-21 inches. It has a glossy, greenish-black crown not extending below the eyes, and a forked tail which extends to or beyond the wing tips when perched. Its bill is slim and yellow-orange in color.

Royal terns breed on the Atlantic and Gulf Coasts from Virginia to southern Texas. They arrive to Virginia about the last week of May, and they nest on sandy islands in large colonies with other terns and gulls. Royals feed mainly on fish, and while they are birds of saltwater and seldom come inland, they often stay late into fall.

Caspian Tern (*Sterna caspia*)

This largest of terns is named for the Caspian Sea where it was first collected and described. From a distance it appears gull-like and often soars high like a gull. It has broader wings than other terns with short, moderately forked tail and a thick red bill. The undersurface of its primaries are almost black. It has a shaggy crested black head.

Caspian terns arrive to Virginia along the coast in April. It may be first seen high overhead uttering its loud, grating, angry-sounding "kahhrrr," call. Not many Caspians nest in Virginia and those that do nest on the undisturbed portions of the Barrier Islands.

Caspian terns are species of special concern; and development on the Barrier Islands and human disturbance may eliminate it as a breeder.

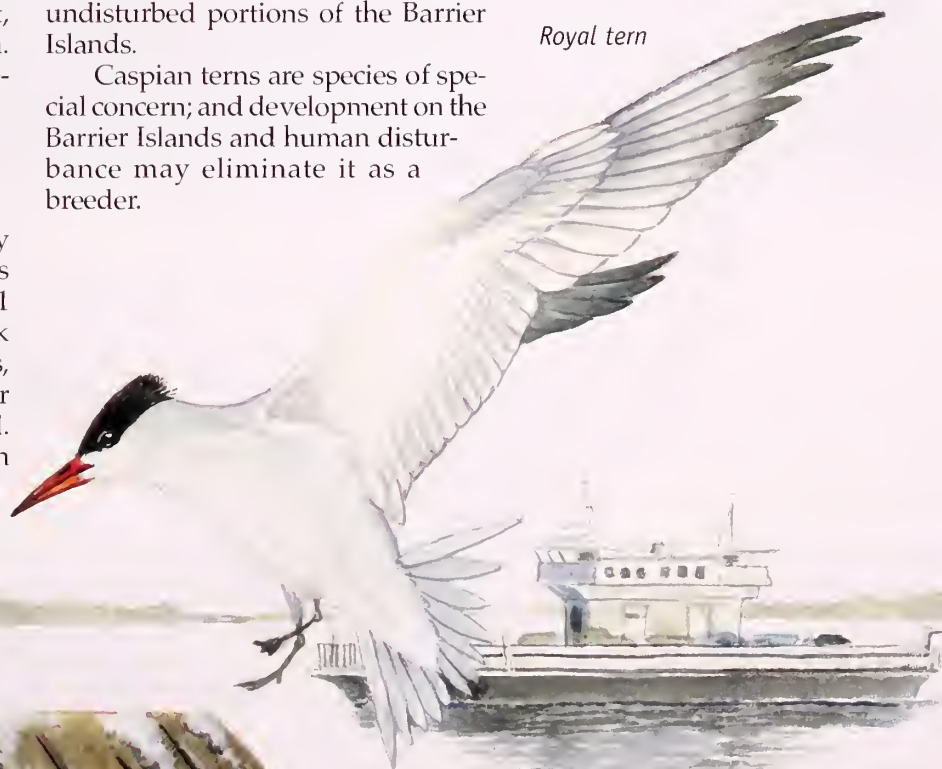
Sandwich Tern (*Sterna sandvicensis*)

The sandwich tern was named where first recognized; Sandwich Kent, England. In the United States it is found along the southern Atlantic and Gulf Coasts. Breeding adults are gray above with a black crown, a short, shaggy crest, and a deeply forked tail. It is the only tern with a black bill tipped in yellow.

It is a fast and powerful flier; one of the fastest of the terns. It arrives to Virginia about mid-April and is noted for its close association with the royal terns. However, it is considered an uncommon nester in Virginia, with most nesting occurring on the Barrier Islands.

Sandwich terns tend to feed more offshore for fish, shrimp, marine worms and squid. They are considered species of special concern due to human disturbance and predation by gulls. They leave Virginia coasts in September and head for Central and South America.

Royal tern



Gull-billed Tern (*Sterna nilotica*)

Once fairly common along the Atlantic Coast, egg and feather hunters nearly wiped it out by the 1900s. Its gull-like bill is stout and short, its body stocky, and it has a slightly forked tail. Its appearance overall is paler than other terns and its legs are relatively longer. The gull-bill's flight looks a little more labored than other terns but it is a strong, swift and direct flier, flying higher and with more rapid wing beats.

The gull-billed tern returns to Virginia in late-April to early-May, and it nests on the sand flats and backs of beaches amid high tide debris. Presently it breeds only on the Barrier Islands of the Eastern Shore. It is unusual in that it feeds almost exclusively on insects like grasshoppers and large spiders and will even follow the plows like gulls.

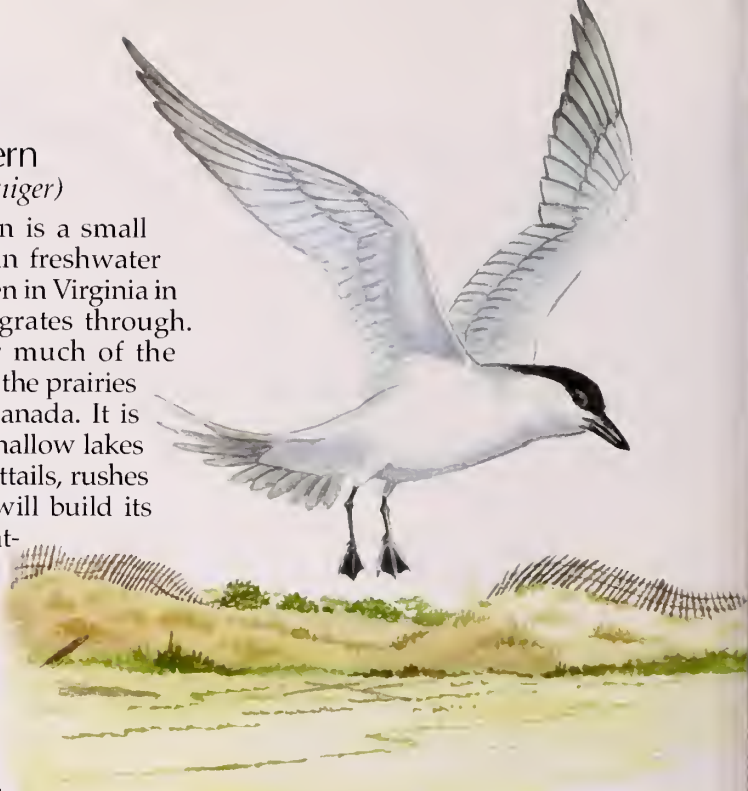
The gull-billed is considered a threatened species in Virginia, and its populations have declined since the early 1900s probably due to loss of nesting habitat and predation by gulls.

Black Tern (*Chlidonias niger*)

The black tern is a small tern that breeds in freshwater marshes and is seen in Virginia in fall only as it migrates through. They breed over much of the northern U.S. and the prairies of the U.S. and Canada. It is mainly a bird of shallow lakes and marshes of cattails, rushes and sedges, and will build its nest on dead aquatic vegetation often on a floating mat. Its breeding plumage is all black, paler towards the back and underside, with gray wings and short, notched tail.

Black terns leave their northern breeding grounds in September with many of them flying directly to the closest sea coast before migrating southward to the coasts of South America. By this time they have lost their black coloring and they take on a gray back and sides, white belly and dark markings around the eye. □

Spike Knuth is an avid naturalist and wildlife artist. For over 30 years his artwork and writing have appeared in Virginia Wildlife.



Gull-billed tern

Be Wild! Live Wild! Grow Wild! is a regular feature that highlights the Virginia Wildlife Action Plan, which is designed to unite natural resources agencies, sportsmen and women, conservationists and citizens in a common vision for the conservation of the Commonwealth's wildlife and habitats in which they live. To learn more or to become involved with this new program visit: bewildvirginia.org.



Black tern, winter plumage



Sunrise to Sunset

*From Dragon Run to Gwynn's Island,
a Piankatank day can only be described
as an angler's dream .*

story and photos by Ken Perrotte

Watch the sunrise as you sit in a shallow draft boat along the meandering, cypress-lined mouth of the Piankatank River's Dragon Run headwaters. Tie on a top-water lure and enjoy the action when large-mouth bass rise to the offering.

Twelve hours later and just minutes from the Chesapeake, gaze west-

ward from the channel beneath the bridge leading to Gwynn's Island as the day's fading light slips below the horizon, we silently and sadly call "last cast" on a remarkable day of diverse fishing.

Virginia's Piankatank River may be considered a little cousin to the Potomac, James and Rappahannock rivers, its tidal relatives emptying into the Chesapeake Bay.

Therein, though, lies the allure, as anglers can be tempted to sample a best of both worlds all in one day of fishing.

That was our Middle Peninsula mission this cool mid-October day as the leaves were beginning to approach their peak of autumn colors.

Chief Powhatan reportedly named the Piankatank well before the English arrived in the neighbor-



hood. It is said to mean “winding waterway.” The Indians dwelling along its fertile shores were in the powerful alliance Powhatan created throughout tidal Virginia.

Captain John Smith is usually credited with naming the Piankatank’s narrow, twisting headwaters “Dragon Run” shortly after the establishment of the Jamestown settlement.

Neither would probably recognize the Piankatank today. Like most accessible waterfront property today, much of the land along the river is being developed. The newer multi-million dollar properties stand in contrast to much smaller cottages and bungalows built decades ago.

The beauty of Dragon Run is that, once you get a couple miles in, you totally lose sight of civilization except for the “No Wake” signs, and it’s not hard to imagine the pristine area as it was experienced in the days of Powhatan and Smith.

Previous page: You need to get up early if you’re going to catch the top-water action at the mouth of Dragon Run. Left: A turning tide and sinking sun mean the bite is on somewhere along the Piankatank River and Capt. Tony Harding quickly heads toward another location. Below: Take your time and enjoy the scenery. “No Wake” signs are common at the lower end of Dragon Run.

Enter the Dragon

Dragon Run is tricky to navigate even when the tide is high and skies are clear. Thick fog and low water make it especially sporty.

Yet, here we were, kicking off the odyssey by crawling along at a beep and creep speed aboard Capt. Mike Starrett’s aluminum fishing boat, equipped with a 35-horsepower jet drive motor. The 6 a.m. fog obscured everything except the faintest outlines of trees along the shore as we slipped into the mouth of the Dragon.

Starrett wanted to be in one particular honey hole at a particular time when the tide would be particularly right. The result he declared would be at least 20 largemouth bass in one hour from a 100 yard stretch of water.

Starrett has fished the upper Piankatank and the Dragon for 19 years, ever since his late father, an Air Force officer, bought a home on a 47-acre spread of paradise back in the 1980s.

The fog began subsiding as we entered the obvious transition zone where the Piankatank necks down to the grassy marshland and narrow meandering creek setting of Dragon Run.

In some places, the water can be deceiving.

Starrett gestured to his right where fish were swirling toward the



surface and the water seemed to open wide. "There's a big, old grassy bed out there," he said, but then added grassy flats with water just a few inches deep can give an illusion of navigable water. It is not.

The jovial skipper explained water gets very shallow, often 18 inches or less, in some parts of the Dragon where its brackish waters merge into the Piankatank.

"Most boats can't get in here," he said. "There are no tournaments. That's partly why the fishing is so great."

Besides bass, the lower Dragon also sports chain pickerel, yellow and white perch, and channel and white catfish. Migratory fish such as rockfish, shad and herring also make spawning runs into the lower Dragon.

Reaching his desired destination, Starrett shut down the jet drive and dropped his trolling motor.

Fallen trees lined the banks, creating incredible structure for prey and predators alike. The 57-degree water was tea-colored, stained and tannic from the cypress roots.

"You'd think a bass couldn't see a lure in water this stained, but don't worry, they see it," Starrett said as he tied a Doniveno Splash-It 2 top-water lure on the heavy (40-pound) braided line.

"This is my \$25 lure," he said. "The good part is, if we hang it up in the trees along the shore (which I did a couple times trying to make perfect casts under and around overhanging structure) we just go get it."

Starrett and his buddy Steve Carle of Browns Island, Md., have clearly worked this piece of water before and deftly pitch their lures into the tightest pockets. Twitch, retrieve, repeat. The gulping sound made by the concave face of the lure as it was popped forward soon caught the bass' attention.

Singles and doubles of healthy fish, eager to bulk up for winter, inhaled the bait and lit up the morning.

"Oh yes, we've got a good top-water bite this morning," Starrett chuckled.

Left: Maryland angler Steve Carle works his lure close to the "knees" of a cypress in the upper stretches of Dragon Run.

Right: Avid fly fisherman Bill Romagnoli, of Stafford, plies the lower Piankatank for striped bass. It is a good idea to have an ample collection of saltwater flies in various colors and sizes. You never know what might be biting.



By 8:30 a.m., well more than the forecasted 20 bass had been caught and released, most in that short stretch of water. As the sun climbed over the tree line, we switched tactics and began throwing soft plastic lures on jig heads into submerged structure, including pools between cypresses. One setting near a boathouse yielded a bunch of fish.

Moving to another location, where mute swans cruised nearby wondering if some food handout might be forthcoming, we boated the last fish of the day. The full Dragon runs some 40 miles through the Middle Peninsula, but the sun was climbing and it was time to head out to bigger waters in the Piankatank. With no breeze, the calm water beautifully re-





Mike Starrett, left, and Steve Carle show off a Dragon Run double with two, healthy largemouth bass. Thick fog was no impediment to hooking up with lots of spunky bass in the upper stretches.

flected the ancient cypresses along the shore.

Reversing course to return to the dock, Starrett folded his hat like blinders over his eyes as fish kept breaking water all around us.

"I did not see that. I did not see that. Must go home," he said with mock, robotic-voiced determination.

The big river beckoned.

Piankatank Pursuit

Leaving the tannic waters of Dragon Run, we transitioned to the deeper blue-green of the Piankatank aboard Capt. Tony Harding's beautiful, bigger water fishing machine.

Harding chopped the motor in a north side cove about a mile east of Ferry Creek near some submerged

oyster bars. Diving birds tipped us that rockfish were probably feeding in the water below on small finfish attracted to microscopic invertebrates along the bar.

Harding, of Spotsylvania, and Dick Romagnoli, of Stafford, were eager to break out their fly rods. I stuck with the spinning gear and we fished quickly near the birds.

It was midday and nearly slack tide. The birds were working, but without consistency. We had probably just missed the best of the morning bite. Anglers who had been trolling yelled over to us that the same area had yielded a good number of rockfish and flounder just a couple hours earlier.

Moving to an expansive flat off a point on the river's opposite side, we set up a drift along a steep drop-off where the water fell from 4 feet to 14 feet. When the water was moving during tide changes, it is a haven for hungry fish staging for a meal.

The area yielded a couple taps, but no hookups. Clearly, the incom-

ing tide near 4 p.m. would be the next hot time to catch fish.

Sailboats increased in number as we crossed under the Route 3 bridge and worked our way toward the bay. The water gets wide past Cherry Point and an increasing mid afternoon wind had seemingly stirred up a sailboat regatta.

We set up a drift parallel to a couple hundred-yard stretch of heavily riprapped shoreline dotted with docks and large, impressive homes. Harding broke the ice by boating a gray trout.

The tide now began steadily rolling in. An opposing wind had us drifting slowly enough that I could easily keep my jig bouncing along near the bottom. Between daydreaming and enjoying the scenery, plus using, apparently, a hook-set touch more geared to largemouth bass, I reared back instinctively on a couple light strikes. Lures with the tails ripped off told of my premature attempt to implant the hook before the fish had taken the whole bait.

Romagnoli, age 73, was a diehard working his fly rod, regularly reaching into his ample collection of flies to make color or pattern changes. The key was getting the bait low enough in the water, and the fish finder showed our targets were very close to the bottom.

The fall speckled trout run was just beginning. The specks Harding brought aboard shimmered beautifully in the late afternoon sun.

By 4:55 p.m., the air began rapidly cooling. High cirrus clouds floated in the deep blue expanse of sky above us. We stopped near a broad dock structure about a mile away from Gwynn's Island for a few quick casts. Romagnoli slipped on heavier outer clothes before we headed toward the marina.

As the sun slunk low and disappeared, we watched birds frantically diving on the water's surface near the Island's bridge. Our feathered assistants had located more fish and Harding and Romagnoli each had bites soon after their casts. The shallow, fast run of the fish helped tip off the species—bluefish.

My casts similarly landed a quick bite but, in keeping with my luck, the toothy blue cleanly severed the line. It was a good time to call it a day.

Timing is Everything

Fishing a tidal river successfully in one day is a challenge since current flow means so much to the bite in a particular area.

Salinity can similarly affect the fishing—as with all lower tidal rivers.

The Piankatank's relatively short length means freshwater flushing following heavy rains can rapidly affect salinity and, consequently, the fish species found in various parts of the river.

The brackish upper part of the river is largely a transition zone. The lower river is exclusively saltwater and depending on seasons and conditions can be teeming with croaker, flounder, trout, spot and red "puppy" drum to name a few.

Still, with the exceptional, unspoiled beauty of Dragon Run on one end and the stately magnificence of the Piankatank as she nears the bay,



Above: The Piankatank River may be one of the few rivers in Virginia where it's a good idea to bring along both fresh and saltwater tackle.

simply getting out to work such diversity of water in one day is a phenomenal experience. Whether you try to eat this tasty enchilada in one bite or break it into a series of targeted locales based on tidal conditions, you won't go wrong in experiencing one of Virginia's premier angling destinations. □

Ken Perrotte is a writer and outdoor columnist for the Fredericksburg Free-Lance Star and lives in King George County.

Contacts

Capt. Mike Starrett, 301/203-0961, www.indianheadcharters.com. Starrett fishes the Potomac, Patuxent and Piankatank Rivers.

Capt. Tony Harding, 540/582-6396, www.flyfishtidalva.com. Harding fishes throughout the region with all kinds of tackle, but his passion is saltwater fly-fishing.



After a morning of largemouth bass action in the upper reaches of the Piankatank, Capt. Tony Harding completes the day with some great eating speckled trout caught near Gwynn's Island.



Journal

2007 Outdoor Calendar of Events

August 7: Flat Out Catfishing Clinic, Pony Pasture, Richmond. For more information call 804-367-6778 or go the online at www.dgif.virginia.gov.

August 10-12: 24th Annual Virginia Outdoor Sportsman Show, The Showplace, 300 Mechanicsville Tnpk, Richmond. For more information call 804-748-7520 or visit www.sportsmanshow.com.

August 24-26: Mother/Daughter Outdoors, Holiday Lake. For more information call 804-367-0656 or go online at www.dgif.virginia.gov.

September 8-9: Western Regional Big Game Contest, Rockingham County Fairgrounds, Harrisonburg. For more information go online at www.iwla-rh.org.

September 22-23: Eastern Regional/State Championship, Southampton County Fairgrounds, Franklin. For more information go online at www.vpsa.org. □

Virginia Hunter Education Challenge Recognizes Champions

The Annual Virginia Hunter Education Challenge was conducted at Holiday Lake 4-H Center in Appomattox, May 4-6, 2007. One hundred and eleven youth on 22 teams from across the Commonwealth competed in shotgun, rifle, archery, a skills trail incorporating "shoot/don't shoot" scenarios, and a comprehensive test encompassing knowledge of wildlife behavior and wildlife identification. The participants were divided into two groups. The Junior Division consisted of participants up to age 14. Seniors were 15 to 19 years

old. The following individuals and teams finished at the top:

Overall Individual

Junior 3rd Place Overall

Culpeper
Zach Beaver

Junior 2nd Place Overall

Nottoway
Will Outlaw

Junior 1st Place Overall

Nottoway
Quincy Elder

Senior 3rd Place Overall

Powhatan
Connor Mulherin

Senior 2nd Place Overall

Culpeper
Brett Woodward

Senior 1st Place Overall

Powhatan
Travis Wagner

Overall Champions

Junior Team Champions

3rd Place
Culpeper

Junior Team Champions

2nd Place
Powhatan

Junior Team Champions

1st Place
Nottoway

Senior Team Champions

3rd Place
Shenandoah

Senior Team Champions

2nd Place
Powhatan

Senior Team Champions

1st Place
Nottoway

Sgt. David Dodson, Hunter Education Coordinator, expressed appreciation for the outstanding efforts by the participants, team coaches, Hunter Education Volunteer Instructors and VDGIF staff for their tireless efforts in making this annual event one of the most suc-

cessful and efficiently operated events of its kind conducted in the past 20 years.

Capt. Bobby Mawyer, Hunter Education Program Manager, commented that the volunteer hunter education instructors provide thousands of hours of invaluable service to sportsmen and sportswomen in numerous events in addition to their classes. The ten-hour Hunter Education Class is mandatory in Virginia for new hunters age 12 and over to obtain a hunting license. Last year, 320 classes were conducted for over 14,000 students by more than 750 certified volunteer instructors. □



"My, this is fun, Jim. You ought to try catching one."

On The Water

by Jim Crosby



Getting All Tied Up!

Does your boat have a painter? Yes, I said painter and I don't mean the person who freshens the finish of your craft. A painter is a line attached to the bow eye of a small craft used to control the vessel during a launch or to attach it to a control point such as a post, tree, dock or even a rock to keep it from floating away.

Those who do boat safety inspections are dumfounded to find so many recreational vessels without dock lines—not even a painter. A knowledgeable skipper wouldn't dream of launching his vessel or leaving the dock without a minimum of four dock lines, one of which could be used as a painter.

Dock lines are so important they are discussed in the first 25 pages of a total of 625 pages in my copy of *Chapman Piloting Seamanship & Small Boat Handling*.

Some of my most amusing, yet frightening, experiences have come from standing on a dock and watching recreational boaters cope without dock lines. There is one I have witnessed so many times I have given it a name. I call it the splashy dashy. It's what boaters do when they push their craft off the trailer without a line attached. As it floats just beyond their grasp, they jump in and chase it down the ramp with the water getting ever deeper until they end up in a frantic swim for their pride and joy. Oh, what a painter could do for them.

The most frightening sight is a boater approaching the gas dock without dock lines. The first urge of those on board are to sit on the bow and catch the dock with their feet, or lean over the gunwale to fend off

with their arms. That is so deadly; the skipper who allows that should be keel hauled—another use for dock lines.

The first rule of safety is to make sure the vessel is secured to the dock before fueling. Having a vessel drift away from the fuel dock while being filled puts everyone at risk. The risks: 1.) Pumping fuel into the bilge or body of water—a definite fire, explosion or pollution hazard. 2.) Those who attempt to thwart the action are put at personal risk for injury.

So, what lines should you have on your vessel? Chapman says, "Lines play an important part in the handling of vessels at a dock. Obviously, the larger the craft the more lines are likely to be called into play."

If we are talking about a dinghy, canoe, or punt, the painter is all one might need—something to keep it from floating away when no one is aboard.

Anything larger should have a minimum of two dock lines on board but four dock lines would be better and eight are necessary if you regularly use a slip in which to dock your jewel of the sea.

Dock lines must be of the appropriate length and diameter for your vessel considering its length and total weight (displacement). They generally have an eye spliced in one end. A painter should never exceed the length of the vessel because if it is dropped overboard while attached at the bow, it could become entangled in the propeller. As a rule of thumb, dock lines should also be the length of the vessel.

The diameter of the line must be large enough to handle the loads that

will be placed on it by your vessel. Obviously a half-inch line would be overkill on a canoe and a quarter-inch line would be too light to handle a 20-foot runabout. Usually the cleats mounted on the vessel by the manufacturer would be a good clue as to the size of line they think should be employed. Line too large would not fit the cleat—the test being can you pass the eye of the line through the hole in the center of the cleat?

Another consideration should be the construction and material of the dock line. Nylon is the most used fiber in dock lines because it has an elasticity that absorbs shock loads, it's strong, soft and flexible. Dock lines can be twisted fibers and strands or braided. I like twisted because it has a greater elasticity and is easily spliced if you don't purchase the commercially made dock lines with the eye splice already made.

I like to make my own dock lines so I buy a 50 or 100-foot length of nylon line $\frac{3}{8}$ inch in diameter for my 18-foot I/O boat. I cut 19-foot lengths and use the extra foot for the eye splice. I fuse the ends with a soldering iron so they won't unravel and you have to be careful not to let the fused end bulk up so it won't pass through an eye or cleat. I melt the end and roll it on a piece of cardboard to make it round and the same size as the rest of the line as it cools.

Boaters need lines and I don't mean those shouted as their craft drifts away unattended. □

Author's Note: I always welcome feedback, input and/or suggestions from readers. My email address is: jecrosby@comcast.net

RECIPES

by Joan Cone

Celebrate Your Shooting with a Dove Meal

Many shooters breast their doves in the field. However for maximum flavor these easily plucked birds can be left whole. The small amount of fat beneath the skin helps to ensure a delicious bird.

Since dove season opens during warm weather, you should field dress them immediately and place in a cooler with ice.

Menu

Ranch Dip

Dove Casserole

Sweet and White Scalloped Potatoes

Cauliflower Salad

One Dish Cinnamon Swirl

Ranch Dip

1/2 cup sour cream
1/2 cup ranch dressing
1/4 cup mayonnaise
1/4 cup grated Parmesan cheese
3 slices bacon, cooked, crumbled
2 tablespoons sliced green onions, optional

Mix all ingredients. Refrigerate 1 hour or until ready to serve. Serve with assorted cut-up vegetables, breadsticks or assorted crackers. Makes 1 1/2 cups.

Dove Casserole

12 whole doves, split down back
Salt to taste
6 tablespoons butter, divided
Paprika
1/2 pound mushrooms
1 can (16 ounces) artichoke hearts, drained
2 tablespoons flour
2/3 cup chicken broth
3 tablespoons cream sherry

Sprinkle doves with salt. Melt 4 tablespoons butter in a large skillet. Place doves, skin side down, in skillet and brown on both sides. Remove doves from skillet; place in a large,

deep casserole and sprinkle with paprika. Place artichoke hearts between doves. Add 2 more tablespoons butter to skillet; stir and then add chicken broth gradually, stirring constantly. Cook for a few minutes and then stir in sherry. Salt and pepper this gravy to taste. Pour the mushrooms and gravy over the doves. Cover casserole and place in a preheated 350° F. oven for 45 minutes or until birds are fork tender. (Allow three birds per serving)

Sweet and White Scalloped Potatoes

1 can (12 fl. ounces) evaporated milk
2 reduced sodium chicken flavor bouillon packets
1 teaspoon onion powder
1/2 teaspoon dried thyme leaves
4 cups (1 1/2 pounds) potatoes, peeled, cut into 1/4-inch slices
2 cups (1/2 pound) sweet potatoes, peeled, cut into 1/4-inch slices
1/2 cup grated Parmesan cheese

Heat evaporated milk, bouillon, onion powder and thyme in large skillet over medium high heat, stirring occasionally, until mixture comes to a boil and bouillon is dissolved. Add potatoes. Cook, stirring occasionally, until mixture comes to a boil. Cover; reduce heat to low. Cook, rearranging potatoes gently and occasionally for 35 to 40 minutes or until potatoes are tender. Sprinkle with cheese and serve immediately. Makes 6 to 8 servings.

Cauliflower Salad

1 medium head cauliflower
1/2 cup French salad dressing
1/2 cup pimiento-stuffed green olives, sliced
1 small avocado, diced
Leaf lettuce
3 medium tomatoes, cut into eighths
1/2 cup crumbled blue or goat cheese

Remove large outer leaves of cauliflower; break cauliflower into flow-

ers. Add salad dressing and toss gently. Add green olives and avocado; toss gently. Arrange lettuce on individual plates and spoon cauliflower mixture onto lettuce. Place tomatoes around cauliflower and sprinkle with blue or goat cheese. Makes 6 to 8 servings.

One Dish Cinnamon Swirl

Bake & Rise Batter

Cooking spray
1 1/2 cups flour
1/4 cup sugar
1/4 teaspoon salt
2 envelopes rapid rise yeast
2/3 cup very warm milk (120 to 130°F)
2 tablespoons butter or margarine, melted
2 tablespoons vegetable oil
1 egg

Cinnamon Mixture

3 tablespoons butter or margarine, softened
3/4 cup light brown sugar
1 1/2 teaspoons cinnamon

Icing

1 cup confectioners sugar
1 to 2 tablespoons milk
1 tablespoon butter or margarine, melted
1/2 teaspoon vanilla

Mix batter ingredients in a pre-sprayed 8 x 8-inch baking dish; let rest for 10 minutes. Combine cinnamon mixture in a small bowl by mixing with fork. Top batter evenly with cinnamon mixture. Using fingers, poke topping thoroughly into batter.

Bake by placing in a COLD oven; set temperature to 350° F. Bake 25 to 30 minutes, until lightly browned and firm in center. Cool 10 minutes. Combine icing ingredients and drizzle over warm cake. Makes 9 servings. □

Photo Tips

by Lynda Richardson

Improve Your Shots With a New Perspective

Have you ever wondered how you could take better photographs? One way to improve your images is to look at how you take pictures in the first place. Most folks just stand their full height and shoot down on subjects. Now, honestly, how do you think that toad is going to look from that angle? Wouldn't he look better at HIS eye level? Of course! So, get down on your belly and capture him eye-to-eye!

Think about other subjects you might want to photograph. Do you have children, grandchildren, a new puppy? Why not get "down to their level" and capture their faces instead of the tops of their heads?

When I photograph a subject, I first look at it from my 5' 4" perspective. Depending on the subject, and where it is, I might walk around it, squat down, look under it, or even lay on my belly. Other times, I might glance around for a rock, tree, chair or a ladder (sometimes even my truck) so that I can get a higher angle. It's amazing how different perspectives can really add excitement and interest to your photographs. Don't be afraid to capture your subject from several different positions and decide which you like best afterward!

So, when you're on that long awaited family vacation this summer, or simply hanging around, don't be afraid to experiment with a new vision. Not only will you enjoy your new perspective, you'll probably have fun doing it! Happy Shooting!

Be sure to check out next month's Photo Tips column; "Improve Your Photographs With Better Composition." □

You are invited to submit one of your best images to "Image of the Month," Virginia Wildlife Magazine, P.O. Box 11104, (4010 West Broad Street), Richmond, VA, 23230-1104. Send original slides, high quality

prints, or high res jpeg files on disk and include a self addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information

regarding how and where the image was captured, what camera, film and settings you used. I hope to see your image as our next, "Image of the Month!"



"On my belly with a Canon T-90, 35mm, film camera, and a Canon 100mm f.4.0, macro lens, I was able to capture this eye-to-eye view of a proud American toad in my backyard." ©Lynda Richardson.

Image of the Month



Congratulations to Nanette Shotwell, of Dumfries, for her beautiful photograph of a tiger swallowtail taken in her backyard garden. Nanette used a Canon Power Shot S400 digital camera with the settings of 1/160th of a second at f4.9 to capture the image. Way to go Nanette!

The New 2008

Virginia Wildlife Calendar

Is Now Available

It's time to purchase the new 2008 Virginia Wildlife Calendar. For more than 20 years the Department of Game and Inland Fisheries has been publishing one of the most informative and beautiful wildlife calendars in the country. This special addition of the Virginia Wildlife Calendar highlights 12 of the 925 species of greatest conservation need identified in the Virginia Wildlife Action Plan. This comprehensive wildlife conservation strategy unites natural resource agencies and citizens through a common vision and concept for the conservation of the Commonwealth's wildlife and habitats in which they live.

An important component of the Virginia Wildlife Action Plan is participation of citizens from around the state to get involved with wildlife conservation efforts. By purchasing the new 2008 Virginia Wildlife Calendar you not only get 12 months of incredible wildlife viewing, but you also take that first step in helping to bring awareness to important wildlife issues facing our state.

Virginia Wildlife Calendars make great holiday gifts and are only \$10 each. They begin with January 2008 and run through December 2008. Quantities are limited, so order now! Make check payable to: Treasure of Virginia and send to Virginia Wildlife Calendar, P.O. Box 11104, Richmond, VA 23230-1104. If you would like to use your VISA or MasterCard you can order online at www.dgif.virginia.gov. **Please allow 4 to 6 weeks for delivery.**

To learn more about the Virginia Wildlife Action Plan visit www.bewild-virginia.org.



© Ken Conger

© Alan G. Nelson
Dembinsky Photo



© Joe McDonald



© Ken Conger

© Ken Conger

For Virginia Wildlife subscription calls only 1-800-710-9369

Twelve issues for \$12.95

All other calls to (804) 367-1000

Visit our Web Site at www.dgif.virginia.gov